

RECEIVED

DOCKET FILE COPY ORIGINAL MAY 21 1997

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C.

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )  
 )  
Amendment of the Commission's Rules ) WT Docket No. 97-81  
Regarding Multiple Address Systems )

COMMENTS

The Burlington Northern and Santa Fe Railway Company ("BNSF") and Norfolk Southern Corporation ("NS"), by their attorneys and pursuant to Section 1.415 of the Commission's Rules, hereby jointly submit comments in response to the Notice of Proposed Rule Making in the captioned proceeding.<sup>1/</sup> For their joint comments, BNSF and NS state as follows:

Procedural Matters

By the NPRM, the Commission sought comments on its proposals to substantially revise its spectrum allocations, licensing approach and technical requirements with regard to Multiple Address Systems ("MAS"). By a subsequent order, the Commission extended the time for the filing of comments in this proceeding to May 1, 1997.<sup>2/</sup> These comments are BNSF's and NS' timely response to those directives.

---

<sup>1/</sup> Notice of Proposed Rule Making, WT Docket No. 97-81, FCC 97-58 (released February 27, 1997) (hereinafter "NPRM").

<sup>2/</sup> Order, DA 97-839 (released April 18, 1997).

No. of Copies rec'd  
List A B C D E

045

## Background

BNSF and NS are publicly traded companies operating rail transportation systems in the United States. They, like other members of the railroad industry, rely on spectrum-based communications facilities for support of a wide variety of mission critical safety and operational functions. The railroads presently utilize MAS systems as integral components of their Centralized Traffic Control systems. The point-to-multipoint telemetry capabilities of MAS systems make them well-suited for the monitoring and control of track integrity and railroad "ground equipment".<sup>3/</sup> It is essential, therefore, that the Commission's ultimate disposition of this proceeding provide the railroads with assurances that they will have access to MAS spectrum capacity for the continuation of present usage and to help meet the ever-expanding safety and operational requirements of a critical component of the national infrastructure.

## Discussion

### Spectrum Allocation

The NPRM divides the 3.2 MHz of radio spectrum presently allocated to MAS into three general "categories" based on their intended and historical usage.<sup>4/</sup> The NPRM recognizes

---

<sup>3/</sup> Railroads use MAS, inter alia, to register occupancy of track sectors; determine and set signal colors; determine and set switch positions; control de-icing mechanisms necessary for the safe and proper functioning of switches; and determine hazardous rail conditions before they endanger the safety of the public.

<sup>4/</sup> NPRM, ¶¶ 9-13.

that the majority of channels in the third MAS spectrum category, consisting of 1.7 MHz of paired spectrum in the 928/952/956 MHz bands, are "used by private systems to satisfy internal communications needs." On that basis, the NPRM tentatively concluded that the 928/952/956 MHz bands should be designated exclusively for private, internal use, but it also proposes the grandfathering of existing subscriber-based services currently being provided on those bands.<sup>5/</sup> The NPRM specifically requested comments to support the Commission's conclusion that such a purely private allocation of MAS spectrum is warranted.

BNSF and NS submit that the Commission must assure the railroads that they will have continued access to specific MAS capacity. The railroads already utilize MAS facilities to meet part of their myriad safety and operational requirements. It is anticipated that expansion of rail operations and the development of new safety-driven communications requirements such as Positive Train Control soon will be straining the spectrum capacity presently available for use by the railroads. At the same time the railroads and other private users will be forced to contend with the adverse economic and operational impact of the displacements occasioned by reallocations of private spectrum to commercial services (e.g., the microwave displacement occasioned by PCS). Because of this spectrum squeeze, the public interest can ill afford to have the railroads deprived of their present reliance on MAS for the support of safety and operational functions.

---

<sup>5/</sup> Id., ¶¶ 12-13.

In sum, BNSF and NS believe that the railroads current and projected use of the 928/952/956 MHz bands supports and justifies the Commission's tentative conclusion that those bands should be designated exclusively for private, internal use. Accordingly, BNSF and NS urge the creation of such a purely private allocation. Believing that prohibitions on subscriber-based use of the 928/952/956 MHz bands are necessary to protect the integrity of any purely private allocation of those channels, BNSF and NS also ask the Commission to consider and adopt such prohibitions.

#### Geographic Licensing

Finding that geographic area licensing "poses significant advantages over site-based licensing for entities providing subscriber-based services," the NPRM proposed to adopt geographic licensing for subscriber-based MAS channels.<sup>6/</sup> At the same time, the Commission requested comment as to whether the 928/952/956 MHz bands also should be subjected to geographic licensing.

As BNSF and NS deem it essential that the Commission allocate the 928/952/956 MHz bands for exclusively private use, they ask that the Commission also focus on the retention of site-by-site licensing for those bands. BNSF and NS recognize that competition mandates that a commercial carrier be able to provide viable wide area service to its subscribers. They must point

---

<sup>6/</sup> Id., ¶ 14 (emphasis added).

out, however, that competition for subscribers does not, and should not, drive a private user's communications requirements.

Instead, a private user needs access to service only at the multiple, discreet, and often isolated, sites where it conducts its activities. In the railroads' case, robust and reliable communications capabilities are essential along rail corridors, at yard and terminal facilities, and at operations control centers. Such site-specific communications requirements can be accommodated without impairing another private user's ability to reuse the same frequencies elsewhere. Such reuse flexibility would be the first victim if geographic area licensing was imposed on private users of the 928/952/956 MHz bands.

As recognized throughout the NPRM, geographic licensing would impair an incumbent licensee's ability to expand coverage as necessitated by safety or operational considerations. BNSF and NS also caution the Commission that geographic area licensing, with the attendant ability to control the use of spectrum throughout most of an area without relation to the licensee's own discreet needs, will almost certainly lead to for-profit partitioning or other commercialization of the private bands.

Given the efficiency and economy with which the railroads and other private users historically have coordinated their site-by-site use of spectrum allocated to private use, there would appear to be no reason to adopt a geographic area

---

licensing scheme for that MAS spectrum which will be allocated exclusively for private use.

#### Expansion of Existing Facilities

The NPRM states that incumbent licensees will "not be permitted to expand their systems without the consent of the geographic area licensee."<sup>17</sup> Having provided support for the Commission's tentative conclusion that the 928/952/956 MHz bands should be allocated for private, internal use, BNSF and NS do not anticipate that legitimate applicants for use of those bands will have to contend with a geographic area licensee's commercial demands.

#### Competitive Bidding

The NPRM, recognizing the probable and actual use of the 932/941 and 928/959 MHz bands for subscriber-based service, proposed the use of competitive bidding ("auction") for choosing among mutually exclusive applications for initial licenses. In the context of proposing auctions for subscriber-based MAS, the NPRM noted that it was seeking comment on how the 928/952/956 MHz bands are being used; the inference being that the Commission also might seek to use auctions to choose among applicants for those MAS channels.

BNSF and NS remind the Commission that it recognized that the 928/952/956 MHz bands "appear currently to be used

---

<sup>17</sup> Id., ¶ 20.

overwhelmingly for private service."<sup>8/</sup> BNSF and NS also have demonstrated that the railroads present and projected use of the 928/952/956 MHz MAS bands is exclusively private and internal.

Given that authorizations for private use of spectrum are sought on an as-needed and site-by-site basis and that the rare conflicts usually can be resolved through good-faith negotiation and coordination, and absent the financial incentives of subscriber-based service, it is unlikely that the Commission will be overwhelmed by a need to select among large numbers of applicants for private MAS facilities. Accordingly, BNSF and NS submit that there is no legitimate basis for the Commission to adopt auctions as its process for choosing among applicants in the 928/952/956 MHz bands.

#### Conclusion

BNSF and NS respectfully submit that, in light of the foregoing, the Commission should allocate the 928/952/956 MHz bands exclusively for private, internal use. And, in furtherance

---

<sup>8/</sup> Id., ¶ 12 (emphasis added).

of such private allocation, the Commission should refrain from imposing either a geographic area licensing scheme or an auction selection process on applicants for initial facilities utilizing the 928/952/956 MHz bands.

Respectfully submitted,

BURLINGTON NORTHERN SANTA FE  
NORFOLK SOUTHERN CORPORATION

By:



A. Thomas Carroccio  
Donald E. Santarelli  
Charles A. Zielinski

BELL, BOYD & LLOYD  
Suite 1200  
1615 L Street, N.W.  
Washington, D.C. 20036  
(202) 466-6300

Their Attorneys

May 1, 1997